

Greenhouse Gas Verification Opinion

The inventory of Greenhouse Gas emissions in year 2024 of

National University of Kaohsiung

700, Kaohsiung University Rd., Nanzih District, Kaohsiung 811, Taiwan,
R.O.C.

has been verified in accordance with ISO 14064-3: 2019 as meeting
the requirements of

ISO 14064-1: 2018

Direct emissions

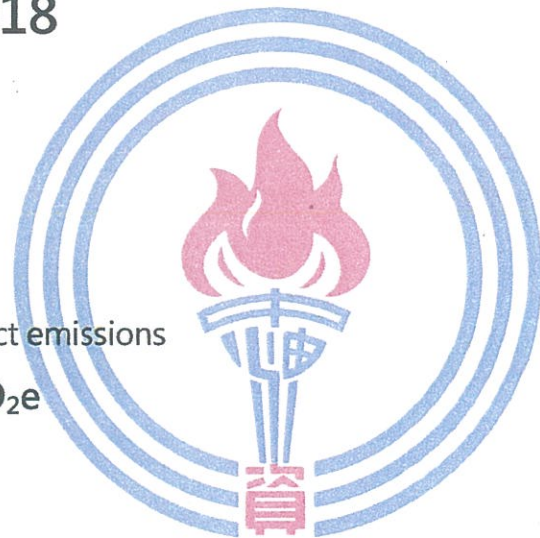
396.7371 tonnes of CO₂e

Indirect emissions

7,794.4709 tonnes of CO₂e

Direct emissions and indirect emissions

8,191.208 tonnes of CO₂e



Authorized by

Guo-Hsu Lu

Guo-Hsu Lu

Authorized Agent of CPC Corporation, Taiwan

No. GTRI-2025-01-0004E

Date: *2025/12/23*



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This Opinion must contain the complete verification scope, objectives, criteria and findings to be valid.

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【The emission of each category is described as below】

 Unit: tCO₂e

| Reporting Boundaries | | GHG Emissions |
|--|---|------------------|
| Inventory Categories | Description | |
| Direct emissions (Category 1) | This direct GHG emissions are the sum of owned or controlled by the organization within the organization. | 396.7371 |
| Imported Energy (Category 2) | Use of electricity under control | 5,576.9688 |
| Transportation (Category 3) | 1.Emissions from employee commuting. 2.Emissions from business travel. | 518.5811 |
| Products Used by the Organization (Category 4) | 1.Emissions from purchased goods. 2.Emissions from disposal of solid and liquid waste. | 1,303.4404 |
| Associated with the Use of Products from the Organization (Category 5) | Emissions from downstream leased assets. | 395.4806 |
| Other Sources (Category 6) | Other sources | N/A |
| Direct emissions and indirect emissions | | 8,191.208 |

CPC/GTRI has been contracted by National University of Kaohsiung (hereinafter referred to as "NUK" ; 700, Kaohsiung University Rd., Nanzih District, Kaohsiung 811, Taiwan, R.O.C.), for the verification of direct and indirect Greenhouse Gas emissions in accordance with

ISO 14064-3: 2019

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as provided by NUK in the Greenhouse Gas (GHG) Assertion in the form of GHG report covering GHG emissions for the period of 1 January 2024 to 31 December 2024 (hereinafter referred to as "REPORT PERIOD").

<Roles and responsibilities>

The management of NUK is responsible for the organization's GHG information system, the development and maintenance of records and reporting procedures in accordance with that system, including the calculation and determination of GHG emissions information and the reported GHG emissions.

It is CPC/GTRI's responsibility to express an independent GHG verification opinion on the GHG emissions as provided by NUK for the REPORT PERIOD.

According to ISO 14064-3: 2019, CPC/GTRI has conducted a third-party verification of the provided GHG statement by NUK against the requirements of ISO 14064-1: 2018 in the period of 16 October 2025 to 17 November 2025. The verification is based on the verification scope, objectives and criteria as agreed between NUK and CPC/GTRI on 24 July 2025.

<Level of Assurance>

The level of assurance for category 1 and category 2 agreed is that of reasonable assurance.

Category 3 till category 6 agreed is that of limited assurance.

<Scope>

NUK has commissioned an independent verification by CPC/GTRI in according to ISO 14064-3: 2019 to assure the reported GHG emissions of NUK, in conformance with ISO 14064-1: 2018 requirements within the scope of verification as outlined below. The data and information supporting the GHG statement is historical in nature.

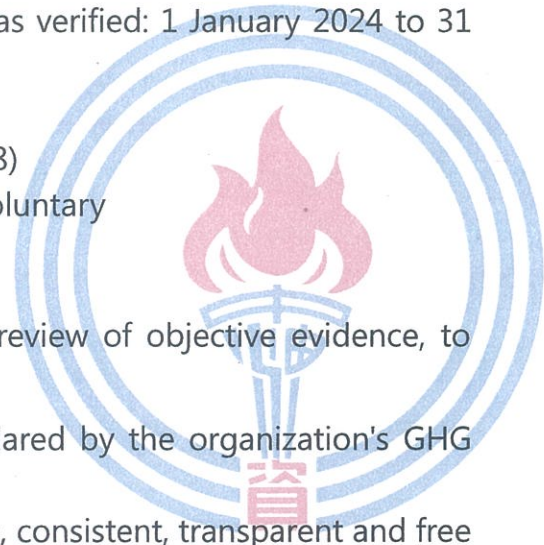
This engagement covers verification of emission from anthropogenic sources of GHG included within the organization's boundary:

- Title or description activities: GHG verification for NUK in year 2024.
- Location/boundary of the activities :

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- 700, Kaohsiung University Rd., Nanzih District, Kaohsiung 811, Taiwan, R.O.C.
- GHG sources, sinks and/or reservoirs included: Sources as presented in the inventory spreadsheet provided by NUK.
- Types of GHGs included: CO₂、CH₄、N₂O、HFCs、PFCs、SF₆、NF₃ and others.
- The IPCC 2021 AR6 GWP (WGIII) values are applied in this inventory.
- Emission factor:
 - Direct emissions: Greenhouse Gas Emission Factor from MOENV (113/2/5 released).
 - Electricity emission factor in 2024 is 0.474 kgCO₂e/kwh (Energy Administration, Ministry of Economic Affairs, Taiwan).
- GHG information for the following period was verified: 1 January 2024 to 31 December 2024.
- The version of inventory sheet: 1141120
- The version of GHG assertion: v1.1 (2025.11.18)
- Intended user of the verification statement: voluntary



<Objective>

The purposes of this verification exercise are, by review of objective evidence, to independently review:

- Whether the GHG emissions are as declared by the organization's GHG assertion.
- The data reported are accurate, complete, consistent, transparent and free of material error or omission.

<Criteria>

Criteria against which the verification assessment is undertaken are the principles of ISO 14064-3: 2019.

<Materiality>

The materiality required of the verification is considered by CPC/GTRI to 5%, based on the needs of the intended user of the GHG opinion.

<Conclusion>

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NUK provided the GHG statement based on the requirements of ISO 14064-1: 2018. The GHG information for the REPORT PERIOD disclosing emissions of 8,191.208 tCO₂e and 0.000 tCO₂e emissions from the combustion of biomass are verified by GTRI to a reasonable level of assurance, consistent with the agreed verification scope, objectives and criteria.

【 The emission of each category is described as below 】

 Unit: tCO₂e

| Reporting Boundaries | | GHG Emissions |
|-------------------------------|---|---|
| Inventory Categories | Description | |
| Direct emissions (Category 1) | This direct GHG emissions are the sum of owned or controlled by the organization within the organization. | 396.7371 |
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| | Associated with the Use of Products from the Organization (Category 5) | Emissions from downstream leased assets. |
| | Other Sources (Category 6) | Other sources |
| | | 5,576.9688 |
| | | 518.5811 |
| | | 1,303.4404 |
| | | 395.4806 |
| | | N/A |

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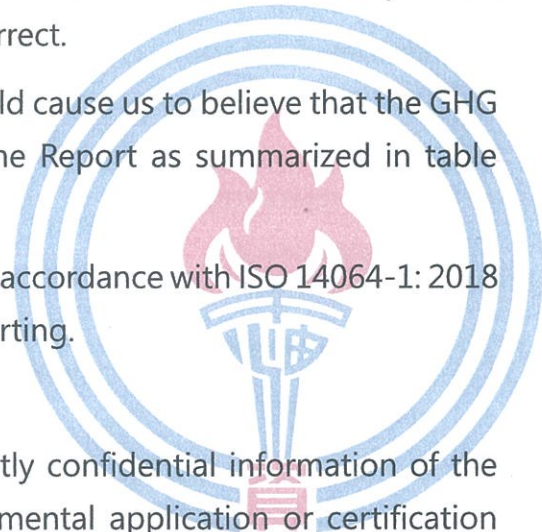
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| | |
|---|-----------|
| Direct emissions and indirect emissions | 8,191.208 |
|---|-----------|

CPC/GTRI conduct this verification with regard to the GHG statement of NUK which includes assessment of GHG information system and reporting plan/protocol. This assessment includes the collection of evidence supporting the reported data, and checking whether the provisions of the protocol reference, are consistently and appropriately applied.

We plan and perform our work to obtain the information, explanations, and evidence that we considered for the REPORT PERIOD,

- The GHG emissions for Categories 1 and 2 disclosed in the Report as summarized in table above are materially correct.
- Nothing has come to our attention that would cause us to believe that the GHG emissions for Category 3~6 disclosed in the Report as summarized in table above is not materially correct.
- The presented GHG statement is prepared in accordance with ISO 14064-1: 2018 on GHG quantification, monitoring and reporting.



<Confidentiality>

The reports and attachments may contain relevantly confidential information of the clients. In addition to being submitted as governmental application or certification documents, the reports and attachments are not allowed to be edited, duplicated, or published without the clients' agreement in written form.

<Avoidance of Conflict of Interest>

The reports and attachments are completely complied with the standards and procedures that related authorities established. The reports and attachments of auditing process are conduct with fairness and honesty. If not, the auditing institution not only has to bear the relevant compensation duties, but also to receive legal charge and punishment.

This opinion shall be interpreted with the GHG statement of NUK as a whole.

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<Verifier Group>

Above opinions coincide with auditing process with fairness and impartiality and aim at the emission of year 2024 of NUK.

Lead Verifier *Pei Chun Lo*

Verifier *Wen Teng Chang*



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